

In the Claims

1. (Currently Amended) An image processing method comprising:
 - capturing a raw image; and
 - providing edge enhancements to increase edge detail of the captured raw image as part of a demosaicing process using a brightness map of the captured raw image, wherein the brightness map comprises luminance values extracted from the captured raw image and the brightness map is approximated from a bi-linear interpolation of the raw image.
2. (Previously Presented) The method of claim 1, further comprising:
 - performing post demosaicing processing on the captured raw image; and
 - outputting the processed image.
3. (Previously Presented) The method of claim 1, wherein providing the edge enhancements includes:
 - creating the brightness map.
4. (Previously Presented) The method of claim 1, wherein providing the edge enhancements further includes:
 - detecting edges of the captured raw image using the brightness map;
 - creating a mask image from the edge detected brightness map; and
 - performing unsharp edge enhancement from the masked image.
5. (Original) The method of claim 4, wherein providing the edge enhancements further includes:
 - blending multiplicatively the unsharp edge enhanced image with the brightness map.
6. (Previously Presented) An apparatus comprising:
 - an image capturing device to capture a raw image; and

a processor to provide edge enhancements to increase edge detail of the captured raw image as part of a demosaicing process using a brightness map of the captured raw image, wherein the brightness map comprises luminance values extracted from the captured raw image and the brightness map is approximated from a bi-linear interpolation of the raw image.

7. (Previously Presented) The apparatus of claim 6, wherein the processor is to perform post demosaicing processing on the captured raw image and to output the processed image.

8. (Previously Presented) The apparatus of claim 6, wherein the processor is to create the brightness map.

9. (Previously Presented) The apparatus of claim 6, wherein the processor is to detect edges of the captured raw image using the brightness map, to create a mask image from the edge detected brightness map, and to perform unsharp edge enhancement from the masked image.

10. (Original) The apparatus of claim 9, wherein the processor is to blend multiplicatively the unsharp edge enhanced image with the brightness map.

11. (Previously Presented) A machine-readable medium that provides instructions, which if executed by a processor, cause the processor to perform the operations comprising:

capturing a raw image; and
providing edge enhancements to increase edge detail of the captured raw image as part of a demosaicing process using a brightness map of the captured raw image, wherein the brightness map comprises luminance values extracted from the captured raw image and the brightness map is approximated from a bi-linear interpolation of the raw image.

12. (Previously Presented) The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, cause the processor to perform the operations comprising:

performing post demosaicing processing on the captured raw image; and
outputting the processed image.

13. (Previously Presented) The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, cause the processor to perform the operations comprising:

creating the brightness map.

14. (Previously Presented) The machine-readable medium of claim 11, further providing instructions, which if executed by the processor, cause the processor to perform the operations comprising:

detecting edges of the captured raw image using the brightness map;
creating a mask image from the edge detected brightness map; and
performing unsharp edge enhancement from the masked image.

15. (Original) The machine-readable medium of claim 14, further providing instructions, which if executed by the processor, cause the processor to perform the operations comprising:

blending multiplicatively the unsharp edge enhanced image with the brightness map.

16. (Previously Presented) An image processing device comprising:
an image capturing unit to capture a raw image;
a memory device to store the captured raw image;
an output unit coupled to the memory device; and
a processor to provide edge enhancements to increase edge detail of the captured raw image in the memory device as part of a demosaicing process using a brightness map of the captured raw image, wherein the brightness map comprises luminance values

extracted from the captured raw image and the brightness map is approximated from a bi-linear interpolation of the raw image, and to cause the enhanced image to be output is to the output unit.

17. (Original) The image processing device of claim 16, wherein the image capturing unit includes a charge-couple device (CCD) array, phototransistors, or photodiodes.

18. (Original) The image processing device of claim 16, wherein the output unit is a display device.

19. (Previously Presented) The image processing device of claim 18, wherein the processor is to perform post demosaicing processing on the captured raw image and to cause the image to be output to the display device.

20. (Original) The image processing device of claim 19, wherein the post demosaicing processing is a white balancing processing or a chromatic improvement processing.